

## Claims:

1. 1. At least one integrated circuit comprising:  
2. image processing circuitry;  
3. said image processing circuitry being adapted to process digital pixel output signals  
4. produced by a digital imaging array;  
5. said image processing circuitry being adapted to process saturated digital pixel output  
6. signals differently from non-saturated digital pixel output signals.
1. 2. The at least one integrated circuit of claim 1, wherein said imaging array includes imaging  
2. array sensors:  
3. said image processing circuitry being adapted to process saturated digital pixel output  
4. signals by subtracting an estimate of the dark image fixed pattern noise for said imaging array  
5. sensors.
1. 3. The at least one integrated circuit of claim 2, wherein said image processing circuitry is  
2. adapted to estimate the dark fixed pattern noise by sampling from a dark image comprising stored  
3. digital pixel output signals.
1. 4. The at least one integrated circuit of claim 3, wherein said image processing circuitry is  
2. adapted to sample the dark image in regions corresponding to the regions of saturated digital pixel  
3. output signals in an image of interest.
1. 5. The at least one integrated circuit of claim 2, wherein said image processing circuitry is  
2. adapted for use with imaging array sensors comprising at least one of a CCD sensor and a CMOS  
3. sensor.
1. 6. The at least one integrated circuit of claim 1, wherein the image processing circuitry  
2. comprises fixed pattern noise reduction circuitry.
1. 7. The at least one integrated circuit of claim 6, wherein the fixed pattern noise reduction  
2. circuitry comprises dark fixed pattern noise reduction circuitry.
1. 8. The at least one integrated circuit of claim 1, wherein said image processing circuitry is  
2. adapted to detect regions of saturated digital pixel output signals in an image of interest.
1. 9. A digital camera comprising:  
2. a digital imaging array comprising a plurality of pixels, and imaging processing  
3. circuitry to process the digital pixel output signals produced by said imaging array;  
4. said imaging processing circuitry being adapted to process saturated digital pixel  
5. output signals differently from non-saturated digital pixel output signals.
1. 10. The digital camera of claim 9, wherein said imaging array includes imaging array sensors;

2           said image processing circuitry being adapted to process saturated digital pixel  
3           output signals by subtracting an estimate of the dark image fixed pattern noise for said  
4           imaging array sensors.

1       11.   The digital camera of claim 10, wherein said image processing circuitry is adapted to  
2           estimate the dark fixed pattern noise by sampling from a dark image comprising stored digital pixel  
3           output signals.

1       12.   The digital camera of claim 11, wherein said image processing circuitry is adapted to  
2           sample the dark image in regions corresponding to the regions of saturated digital pixel output  
3           signals in an image of interest.

1       13.   The digital camera of claim 10, wherein said image processing circuitry is adapted for use  
2           with imaging array sensors comprising at least one of a CCD sensor and a CMOS sensor.

1       14.   The digital camera of claim 9, wherein the image processing circuitry comprises fixed  
2           pattern noise reduction circuitry.

1       15.   The digital camera of claim 14, wherein the fixed pattern noise reduction circuitry  
2           comprises dark fixed pattern noise reduction circuitry.

1       16.   The digital camera of claim 9, wherein said image processing circuitry is adapted to detect  
2           regions of saturated digital pixel output signals in an image of interest.

1       17.   A method of processing digital pixel output signals produced by a digital imaging array  
2           comprising:

3           processing saturated digital pixel output signals differently from non-saturated digital pixel  
4           output signals.

5       18.   The method of claim 17, wherein said imaging array includes imaging array sensors;  
6           and further comprising estimating the dark image fixed pattern noise for said imaging array  
7           sensors;

8           wherein processing saturated digital pixel output signals differently includes subtracting an  
9           estimate of the dark image fixed pattern noise for said imaging array sensors.

1       19.   The method of claim 18, wherein estimating the dark fixed pattern noise comprises  
2           sampling from a dark image comprising stored digital pixel output signals.

1       20.   The method of claim 19, wherein sampling from a dark image comprises sampling the dark  
2           image in regions corresponding to the regions of saturated digital pixel output signals in an image  
3           of interest.

1       21.   The method of claim 18, wherein said imaging array sensors comprise at least one of a  
2           CCD sensor and a CMOS sensor.

- 1 22. The method of claim 17, wherein processing saturated digital pixel output signals
- 2 comprises fixed pattern noise reduction processing.
- 1 23. The method of claim 22, wherein fixed pattern noise reduction processing comprises dark
- 2 fixed pattern noise reduction processing.
- 1 24. The method of claim 17, wherein processing saturated digital pixel output signals includes
- 2 detecting regions of saturated digital pixel output signals in an image of interest.